



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,577	08/17/2001	Shinji Negishi	SON-2196	2196
7590 07/10/2008 RADER, FISHMAN & GRAUER, P.L.L.C. 1233 20th Street, NW, Suite 501 Washington, DC 20036				
EXAMINER VAN HANDEL, MICHAEL P				
ART UNIT 2623		PAPER NUMBER		
MAIL DATE 07/10/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

<b>Application No.</b> 09/931,577	<b>Applicant(s)</b> NEGISHI ET AL.
<b>Examiner</b> MICHAEL VAN HANDEL	<b>Art Unit</b> 2623

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 May 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

/Chris Kelley/  
Supervisory Patent Examiner, Art Unit 2623

Continuation of 11.

Regarding claims 1, 14, 27, 40, 78, 95, and 105, the applicant argues that Kalra et al. fails to teach or suggest an elementary stream (ES) processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from the receiving apparatus, and a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES from the ES processing means by adjusting the properties assigned to the ES within the scene description. The applicant specifically argues that Kalra et al. does not identify a separate element comparable to the scene description. The examiner respectfully disagrees.

Kalra et al. discloses that, at the beginning of a 3D transaction, the global data and all or part of the spatial data structure, which describes the relative positions and sizes of the objects composing the scene is transmitted. Thereafter, a description of the objects in the leaf nodes of the spatial data structure is transmitted. Following this, the geometry, texture and material data is streamed in on an on-demand basis and based upon the available network bandwidth and CPU constraints (col. 19, l. 46-64). Kalra et al. further discloses producing an optimized scene graph by implementing a K-D tree for spatial localization (col. 20, l. 40-46). Figure 19 illustrates digital data that represents a scene. So that this scene can be transmitted using graphic adaptive streams, this scene is first placed in a spatial data structure that allows within the entire space to each be defined in terms of a subspace (col. 20, l. 47-51 & Fig. 19). As a result of this process, a K-D tree, such as that illustrated in Figure 21, results (col. 21, l. 35-41 & Fig. 21).

Internal nodes within the K-D tree contain objects, each of which may have an associated geometry, a texture, and a material (col. 21, l. 47-49, 61-63). Once the K-D tree has been computed, a bare bones scene graph and remaining additive scene graph components are stored (col. 21, l. 63-66). Geometry, texture, and material data can be correlated to particular objects (col. 21, l. 66-67 & col. 22, l. 1). Geometric multi-resolution encoding takes place so that, for each object, there is a base mesh that corresponds to the simplest representation of that object, as well as a sequence of vertex split records that further define the geometry for that particular object and provide additive degrees of resolution. This geometry data is stored in memory (col. 22, l. 1-10). Texture multi-resolution data and graphic material data are encoded similarly (col. 22, l. 10-15). Once the multi-resolution encodings relating to geometry, material, and texture characteristics are obtained for each object in a scene graph, all of these various characteristics are stored in storage to be used for streaming when a user wishes to look at the data (col. 22, l. 66-67 & col. 23, l. 1-3). Scene graph node to object node mapping also takes place, so that each of the objects in a scene are associated with one leaf or internal object node (col. 23, l. 28-30). Kalra et al. further discloses sending multiplexed stream data to the decoder of the receiver, which inserts this data into a local data dictionary (col. 23, l. 8-27, 60-67). If the data includes a node, it refers to a node in a tree. For such data, types of operations that are carried out include adding the node to the tree, associating a bounding box with that node, adding an object to the node, and associating the ids of texture, shape and material to an object in the node (col. 24, l. 20-27).

The examiner notes that the scene graph describing the nodes and their corresponding objects and object attributes are separate from the attributes (geometry data, texture data, material data, etc.) themselves. This is best illustrated in Figure 17, where it is shown that scene graph multi-resolution encoding occurs separately from the geometric, texture, and material multi-resolution encodings of the objects (Figure 17). The examiner interprets the objects and their corresponding attributes as elementary streams, as claimed, and interprets the scene graph as a scene description, as claimed. As such, the examiner maintains that Kalra et al. meets the limitations of "an elementary stream (ES) processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from the receiving apparatus, and a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES from the ES processing means by adjusting the properties assigned to the ES within the scene description," as currently claimed.